

TAXONOMIC STUDY OF THE GENUS ISCHNODACTYLUS CHEVROLAT (COLEOPTERA, TENEBRIONIDAE) WITH DESCRIPTION OF A NEW SPECIES FROM CHINA

REN Guo-Dong, HUANG Wen-Jing

College of Life Sciences, Hebei University, Baoding 071002, China; E-mail: gdren@hbu.edu.cn; 11 huangwenjing22 @63.com

Abstract The paper deals with the genus *Ischnodactylus* Chevrolat, 1877 from China. A key to species of genus from China is provided. A new species *I. storthus* sp. nov. is described. The type specimens are preserved in the Museum of Hebei University.

Key words Coleoptera, Tenebrionidae, *Ischnodactylus*, new species, China.

The genus *Ischnodactylus* was erected by Chevrolat in 1877, belonging to Diaperini (Coleoptera, Tenebrionidae). Up to the present time, there have been 47 species and subspecies of the genus described in the world. The genus is mostly distributed in the Oriental Region and Japan. In China, 3 species were recorded and one new species, *I. storthus* sp. nov., is described here. The type specimens are preserved in the Museum of Hebei University.

Ischnodactylus Chevrolat, 1877

Ischnodactylus Chevrolat, 1877. *Pet. Nouv. Ent.*, 2: 173.

Type species: *Ischnodactylus quadriculatus* Chevrolat, 1877.

Diagnosis. Oblong-oval. Head flattened. 2 symmetrical slender horns often on frons of male, base suddenly dilated and closer each other to forwards, terminal hairless or a cluster of fuzz; a few species no horns. Pronotum convex in middle, sides brightly reduced. Elytra often metallic shine, epipleuron entire, Shoulders un conspicuous, and base band fleck or 0, 2, 4 or 6 round or angulose fleck.

Key to known species of *Ischnodactylus* Chevrolat from China

1. Elytra with fleck round or angulose, not band
..... *I. rubromarginatus yunnanus* Kaszab
- Elytra with fleck band 2
2. Elytra only with anterior band 3
- Elytra not only with anterior band, but also with latter band
..... *I. bisbifasciatus* Gebien
3. Horns of head have hairless in the apex *I. formosanus* Gebien
- Horns of head have hairs in the apex *I. storthus* sp. nov.

The species of China

1) *Ischnodactylus rubromarginatus yunnanus* Kaszab, 1965

Ischnodactylus rubromarginatus yunnanus Kaszab, 1965. *Annls. Hist. Nat. Mus. Natn. Hung.*, 57: 284.

Distribution. China (Yunnan, Siaomengyan).

2) *Ischnodactylus bisbifasciatus* Gebien, 1925

Ischnodactylus bisbifasciatus Gebien, 1925. *Phil. J. Sci.*, 27 (3): 425, 446; Gebien, 1940. *Mitt. M. üch. Ent. Ges.*, 30: 418.
Basides ruficornis Pic, 1925. *Échange*, 41: 16.
Basides ruficornis Pic, 1925. *Bull. Mus. Hist. Nat. Paris*, 31: 434, 437.

Distribution. China (Taiwan).

3) *Ischnodactylus formosanus* Gebien, 1925

Ischnodactylus formosanus Gebien, 1925. *Phil. J. Sci.*, 27 (3): 424, 445; Gebien, 1940. *Mitt. M. üch. Ent. Ges.*, 30: 418; Pic, 1925. *Bull. Mus. Hist. Nat. Paris*, 31: 436.

Distribution. China (Taiwan).

4) *Ischnodactylus storthus* sp. nov. (Figs. 1-10)

Colour bright black; horns of head, antennae, legs, abdominal and elytral lateral marginal beset reddish brown; each elytron with a saffron yellow anterior band which is occupying from 2nd to 5th interval, terminal reddish brown () or black ().

Male. Head transversely triangular; clypeus feebly convex, the front margin nearly truncate; anterior genae convex, sides slightly arcuate, posterior genae inseted in compound eyes; frons smooth, with a pair of horns, which are very fine and long, rivet-form, closer each other, horizontally running forwards, and whose base is thick and sheet-form, terminal cylindrical, slightly bent and haired. Antennae (holotype lack of the last two segments) reaching base of pronotum, beginning to swell and loosely stick from 3rd segment, relative length of each segment from 2nd to 9th: 1.9 4.0 4.1 2.9 3.0 2.8 2.9 2.5.

Pronotum transverse, about 2.5 times as broad as long; front border arcuate; side borders arcuately shrinked from base to apex; hind border protuberant in middle, and straight in side; beset distinct; front angles obtusely triangular, hind angles rectangular; disc weakly convex, covered with even punctures. Scutellum semicircle, sparsely punctured. Elytra oblong-oval, feebly convex, about 3.0 times as long as broad; Shoulders slightly caelate; lateral margins subparallel,

The project was supported by the National Natural Science Foundation of China (30570209), Key Laboratory of Invertebrate Systematics and Application of Hebei Province (ISA08002), The Ministry of Science and Technology of the People's Republic of China (MOST grant no. 2006FY110500).

Received 2 Apr. 2008, accepted 22 May 2008.

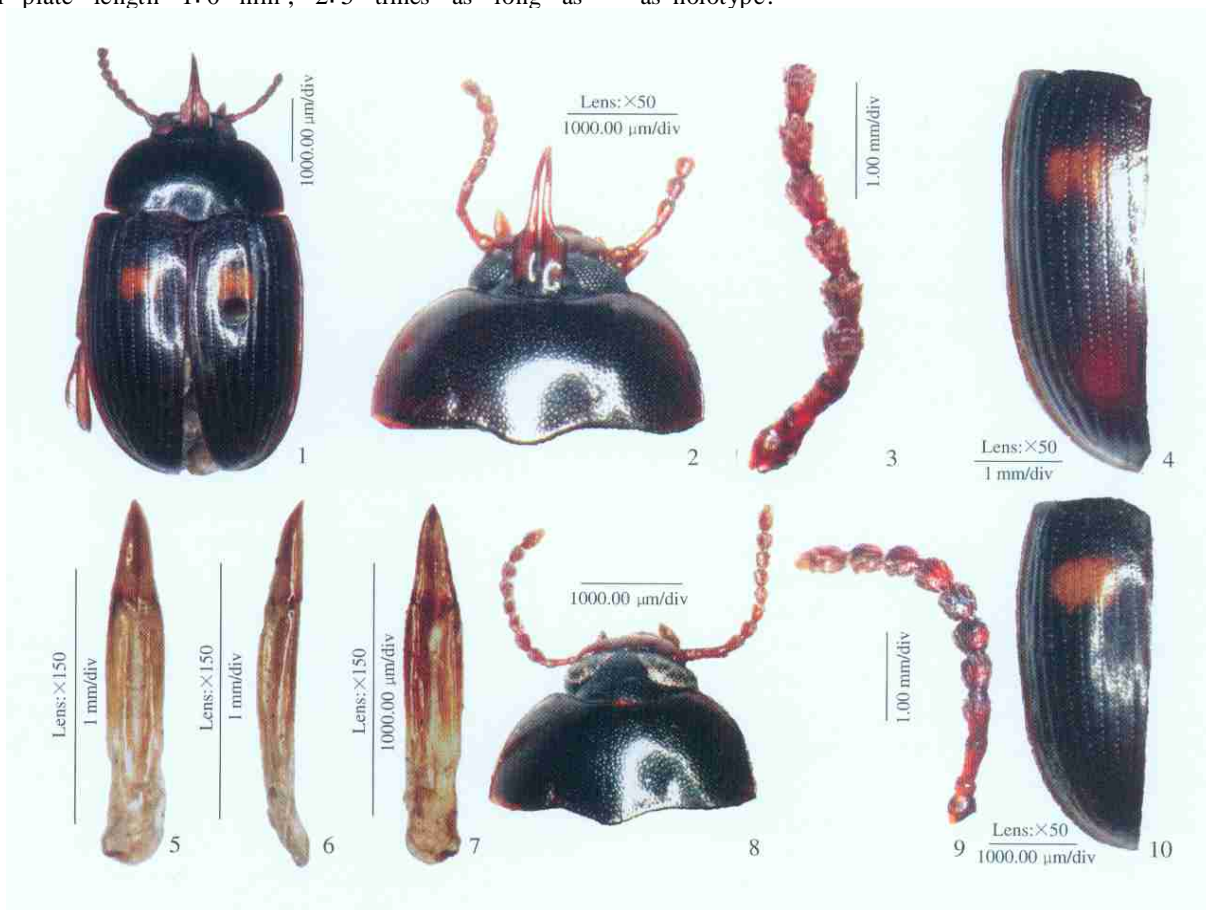
beset visible in dorsal view; disc convex, the punctator-striate deep, the punctures in striate distinct, intervals nearly flat, finely and evenly punctured. Legs slender, meso and metatibiae slightly broad, tarsi long. Prosternum in middle and prosternal process pubescent; Prosternal process long and narrow, acute at apex, and lateral marginal beset visible. Anal segment transverse triangular, feebly convex, base and margin pubescent. Aedeagus length 1.4 mm, width 0.3 mm; parameres length 0.4 mm, spiky-form, base of sides weakly bent; basal plate length 1.0 mm, 2.5 times as long as

parameres, and 2/3 sides parallel, 1/3 terminal shrunk, with 2 longitudinal carinae in 2/3 base in the dorsal view.

Female. Frons not horns; elytral fleck occupying from 2nd to 5th interval, and some parts extending to 6th interval; other characters as male.

Body length 6.0-6.2 mm, 5.8-6.0 mm, width 2.9-3.0 mm, 2.7-2.9 mm.

Holotype, Mt. Jianfeng, Ledong, Hainan Province, 17 May 2007, collected by BA Yi-Bin and LANG Jun-Tong. Paratypes 2, 2, same data as holotype.



Figs. 1-10. *Ischnodactylus storthus* sp. nov. 1. Adult male. 2. Head and pronotum. 3. Left antenna. 4. Left elytron. 5-7. Aedeagus, dorsal, ventral and lateral view, 8. Head and pronotum. 9. Right antenna. 10. Left elytron.

Diagnosis. The new species is close to *I. formosanus* Gebien, 1925, but differs in: 1) the body clearly wider and shorter than the latter; 2) the horns of frons thick and large on base, terminal hairy, or the latter horns of frons weakly S-form bent, terminal hairless; 3) the elytral fleck small, bowknot-form, which is occupying from 2nd to 5th interval, or the latter elytral fleck big, not bowknot-form, occupying from 2nd to 8th interval.

Etymology. The specific name is derived from that male specimen in the middle of frons having a pair of apposed rivet-form horns.

Acknowledgements The authors wish to express their thanks to BA Yi-Bin and LANG Jun-Tong for providing

specimens collected in Mt. Jianfeng.

REFERENCES

- Ando, K. 1978. A new *Ischnodactylus*-species from Japan (Coleoptera, Tenebrionidae). *Entomological Review of Japan*, 32: 81-84.
- Ando, K. 2001. A review of Sulawesi *Ischnodactylus* (Coleoptera: Tenebrionidae), with revised list of the world species. *Special Bulletin of the Japanese Society of Coleopterology*, (1): 175-192.
- Gebien, H. 1925. Die Tenebrioniden (Coleoptera) des Indo-Malayischen Gebietes, unter Berücksichtigung der benachbarten Faunen, -Die Gattungen *Ischnodactylus*, *Hoplocephala*, und *Martianus*. *The Philippine Journal of Science*, 27 (3): 423-452.
- Kaszab, Z. 1965. Neue Tenebrioniden (Coleoptera) aus China. *Annales Historico-naturales Musei Nationalis Hungarici*, 57: 279-285.
- Kulzer, H. 1964. Über neue Tenebrionidenarten (Col.). *Entomologische Arbeiten aus Dem Museum G. Frey*, 15: 221-276.
- Lewis, G. 1894. On the Tenebrionidae of Japan. *Annals and Magazine of*

Natural History, 6 (13) : 377-400.

Nakane, T. 1956. New or little-known Coleoptera from Japan and its adjacent Regions, . The Scientific Reports of the Saikyo University, 2 (3A) : 131-174.

Pic, M. 1925. Descriptions abrégées diverses. Mém. Exot. -Ent., 20 : 1-20.

Pic, M. 1925. Coléoptères exotiques en partie nouveaux. -L'Échange, 41 : 15-16.

Pic, M. 1925. Contribution à l'étude des Ténébrionides du genre Basides Mots. Bulletin du Museum National d'Histoire Naturelle. Paris, 31 : 431-438.

Ren, G-D and Gao, C 2007. A taxonomic study on the genus *Ceropria* from China (Coleoptera, Tenebrionidae). Acta Zootaxonomica Sinica, 32 (1) : 200-207. [动物分类学报]

Schawaller, W. 2004. The Oriental species of *Platydena* Laporte & Brullé, with descriptions of 16 new species (Coleoptera: Tenebrionidae). Stuttgarter Beiträge zur Naturkunde, (A) 671 : 1-49.

中国角菌甲属分类研究及一新种记述（鞘翅目，拟步甲科）

任国栋 黄文静
河北大学生命科学学院 保定 071002

摘 要 对中国的角菌甲属 *Ischnodactylus* Chevrolat, 1877 进行了分类整理，给出了已知种的识别检索表并描述了 1 新种。模式标本保存于河北大学博物馆。

尖角角菌甲，新种 *Ischnodactylus storthus* sp. nov. (图 1~10)

正模，海南乐东尖峰岭，2007-05-17，巴义彬和朗俊通采。副模：2，2，记录同正模。

关键词 鞘翅目，拟步甲科，角菌甲属，新种，中国。

中图分类号 Q969.498.2

新种在外形上与台湾角菌甲 *I. fimosanus* Gebien, 1925 近似，两者的主要区别为：1) 前者身体较宽短，而后者则较长；2) 前者额角基部粗大，端部具毛；而后的额角弱 S 形弯曲，端部无毛；3) 前者鞘翅斑纹小，呈蝶结状，位于第 2~5 行间；而后者翅斑大，非蝶结状，位于第 2~8 行间。

词源：种名取自额中央有 1 对并列的钉状齿。